Bio-Diversity *and Seasonal impact on* of Avian Fauna of Aundha Forest, Dist Hingoli (M.S.)

Submitted To
Swami Ramanand Teerth
Marathawada University, Nanded
In Subject of Zoology

By
Ku. Lalita Pandurang Saptal
Dept of Zoology
Nagnath College, Aundha (Nag)

Under the Guidance
Dr V.S. Kanwate
Principal
Nagnath College Aundha (Nagnath) Dist Hingoli
(M.S.)

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1. Introduction :-

In our country rural community largely depends on agriculture , keeping this view to develop the forest , forest birds, animals population for developing the agricultural economic rate of country. The rain water leads to decrease population of birds and forest, because of which unfortunately hunter, farmers, villagers are committing suicide. So it is necessary to create and awareness among them about the importance birds in forest ecosystem. i.e. In food chain of forest. It will also be useful to create an awareness of environmental population, food chain , food verb and defertilization. It also inuities effective measures to be taken for the desire resisted variety and increasing population of birds in forest.

Birds are now major source of attraction in rural development at global level or forest development. Ornithology involves identification, distribution and classification of birds and its potential importance in various areas in forests ecosystems, ponds and riverine ecosystem and adjoining villages etc. based on the avian fauna and data correct identification of the birds and their availability, behavior , food, feeding habited are verified and after the physical condition of forest and climate condition the appropriate result obtain this process is more

related to identification of birds diversity , its occurrences and availability and its migration for forest ecosystem.

Aundhja (Nag.) is one of taluka place of Hingoli district (M.S.) is 25 km. away Hingoli. Aundha (nag) forest surround by small village by hills. This forest area exhibits typical forest bird faong. The forest carrity of variny trey such as talk, various bushes *Azadirachita indica (Nim), Butea monosperna (Palas), Calotropis procera(Rui), Citrus qurastifola (Limb), Zizyphus manpnritiara (Ber)* and seasonable cultivated crops like Tur ,Jowar,Wheat, Sunflower etc.. The forest having good avain fauna. There is no available data of avain fauna scientific and systematic study of this area. Generally the birds found in this forest is, Indian Robin, White throated kingfisher ,Red-vented bulbul, Indian myana, Yellow lapwing Dove, Common Dove, Spotted Dove, Jungle crow , Indian roller, Green bee eater, Common Babbler, and Some migratory birds , some ponds birds also.

2. Review of Literature and Development in the Subject.

Importance of Birds to man is known since ages. 'Hans Deo' a jain muni has classified birds and their details are given in "Mrigpakshishastra". Charak , Susrut Wagbhat, Cchakrapani and Dalhanacharya have also described birds in Ayurveda (Chitampali, 1993). Ali (1936) has laid the foundation of economic Ornithology. Role of birds in pollution have been studied by Singh (1929 ?). Ramkrishnan

(1983) studied ecology of birds in Malbar forest. Ghazi (1962) studied piscivorous birds of Madras. Kulkarni and Kanwate (2002) studied piscivorous birds of Dongarkheda dam, Hingoli. Jayson and Mathew (2002) have studied the structure and composition of the bird's communities in the Southern Western Ghats. Kulkarni and Deshpande (2002) have done work on survey and identification of avian fauna, Nanded region.

Aundha forest is most important in Hingoli. The forest is dry, deciduous and total area is 74568 ha. Rainfall in 2014-2015 is 475 mm. Maximum Temperature is 45.6^{o} C. and Minimum is 13.9^{o} C. Forest is rich with wildlife and Teak plant. The important dam is Aundha. Forest also exhibits characteristic bird's fauna. Beside the local birds, migratory birds also visits at various habitats in this forest.

So far no scientific data is available on the avian fauna of the Aundha forest. It has necessary to carry out scientific work on bio-Diversity and seasonal impact on avian fauna of this forest. This will contribute to the bio-diversity studies and for making conservation policies of these flying animals.

3. Objectives of the Research

The Proposed Research work is aimed at,

1. Making first scientific efforts of bio-diversity studies of avian fauna in existence at different habitats in the forest.
2. To record details of migratory and local birds.

3. To prepare a check-list of birds.
4. To find out seasonal impact on the avian fauna.
5. To find out relationship between forest flora and fauna.

4. Methodology to be adopted

1. It is proposed to carry out periodic and seasonal visits to selected spot like Aundha village near college, Nageswarwadi, Jawala, Pimpaldari. In the first years data will be collected at Aundha Village, Nageswarwadi, Jawala, and Pimpaldari.
2. Vegetation structure profile, class distribution, percentage composition and diversity of the trees will be worked out as per the guidance given by Philips (1959).
3. Bird counting and observation will be done by adopting method described by Salim Ali (1980). The birds will be identified by standard reference books by Ali and Ripley (1996), Gaikwad *et al* (1997), Pande *et al* (2011).
4. .**During research work, observation period will be fixed as per the requirement**.
5. The commonness and Dominance to index of selected species will be calculated.
6. Changes in bird species richness according to the season will be carried out.
7. **Effect of temperature, rain on occurrence of birds will be recorded.**
8. During the proposed research work birds will be photographed and photo-transferences are proposed to be made out.
9. . Proper guidance from the experts in the field will be saught.

- to prepare authentic check-list of birds occurring in the forest.
- T**ools to be used in collection of data**

a) Use of appropriate Binocular and telescope

b) Use of suitable photographic instruments.

c) Periodic visits to scientific institutes like ZSI (Western Region,Pune), WWF-India,Pune- Delhi, BNHS, Bombay will be made**. who care for the studies of the birds.**

d) Consultation with the experts in this field. **for identification and survey.**

5. Importance of Study

(International studies, National studies, significance of the study)

This research work having following types of international, National studies and also significance.

1. It helps to Government for construction of water projects to keep environmental balance.
2. It helps to government for construction of big (Highway) raod near from forest small village to big city.
3. It is beneficial for forest animal life and also increasing population of animals for keeping food chain forest.
4. It helps to keep omrdant all types of food chain forest ecosystem. (Pond, Tank, River, Canal.)
5. This work give an idea for government to construction / cultivation big tree, small tree, fruit tree, and other police matter there are useful to save forest animal vertebrate life, hunting people.
6. It may be develop all Indian/ world people to awareness about forest bird significance role of birds in forest ecosystem. It may be effect an socio economic condition of former and other people also. (village and city people)

7. It International level known the which type of birds herbivorous, carnivorous, omnivorous, position of forest condition in India, are useful to keep good condition of forest food chain to keep natural balance.

   This work is not only useful for National level but also International also and significant for environmental study of various research and sciences.

6. Proposed Work Plan

- **I year Plan**

1. Selection of Site
2. Collection of Literature
3. To study observed birds

- **II year Plan**

1. To Study monthly observed bird's classification and Identification.
2. Comparison study of various spots birds
3. Conformation observation of birds.

- **III year Plan**

1. Study of nutritive value of food birds
2. Development and suggestion for conservation of birds.
3. Thesis writing and submission to university for the award of Ph.D. Degree.

   The Present Research work may be completed within three year.

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Research Guide	Research Scholar
Dr. V.S. Kanwate	Ku. Lalita Pandurang Saptal